

## FGB INGRESS

### TOOLS AND EQUIPMENT REQUIRED:

Flashlight  
APAS Hatch Tool  
"Return to Houston" Bag  
Air Sample Bottle (one)  
Ratchet Wrench  
8mm Deepwell Socket  
Wire Cutters  
Duct Tape  
Trash Bag

CRT

SPEC 66 ENVIRONMENT

1. When CABIN dP/dT < 0.01 (~15 minutes)

EPCS

FGB: ECLSS

FGB: ECLSS

√FGB Nod1 PEV - Op

### 2. INGRESS PA

FGB

APAS  
Hatch

Per **MCC-H**, open FGB PA APAS Hatch

1. Select 'ÐÀÁÎ ×ÅÅ' (WORKING) torque setting on hatch tool.

2. Insert tool in hatch socket.

3. Rotate 3 to 3.5 turns in direction of 'Î ÒËÐ' (Open) arrow until it clicks. |

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* If tool prematurely slips or does not engage *
* Select 'ÀÅÐÉÉÍ Î Å' (EMERGENCY) setting *
* on hatch tool. *
* Reattempt to open Hatch. *
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4. Verify all latches are opened.

5. Remove tool.

6. Open Hatch.

7. Tether Tool on hatch handle. |

8. Secure Hatch in open position using fixing device.

9. Inform **MCC-H** of PA Hatch opening complete.

- PA 4th Plane 3. PA AND ICC LIGHTING ACTIVATION  
1. 1,2,3,4-Ē1 (switch) → On (switch up)

2. √LEDs Ä1,2,3,4 (four) - ■ (off)

NOTE

Light switch 5-Ē1 is non-functional.

- PA 2nd Plane 4. READY OCĪ -4 FIRE EXTINGUISHER IN PA  
1. Remove blue launch restraint bolts (four) from clamps (two) with Ratchet and Socket (8mm Deepwell Socket).  
Stow clamps and bolts in "Return to Houston" Bag.

5. ĒĪ K-1 GAS MASK READINESS

1. Cut lock wire from cap and dispose in Trash Bag.

- PA 6. INGRESS ICC

1. **On MCC-H GO**, open FGB PA-ICC Hatch  
Rotate hatch handle in direction of OPEN (OTĒPÜITO) position.  
Open Hatch until Hatch clicks and stops.

2. Inform **MCC-H**, PA-ICC Hatch is opened.

7. TAKE AIR SAMPLES OF FGB

1. Collect air sample (one) inside the FGB ICC.  
Stow Air Sample Bottle (one) in "Return to Houston" Bag.

- ICC Port 8. ICC LIGHTING ACTIVATION  
Panel 414 1. 1-Ē1 (switch) → On (switch up)  
ÜĪ -ĒĪ √LEDs Ä1,2,3,4 (four) - ■ (off)

- Panel 430 2. 1-Ē1 (switch) → On (switch up)  
ÜĪ -ĒĪ √LEDs Ä1,2,3,4 (four) - ■ (off)

NOTE

Light switch 5-Ē1 is non-functional on panels 430 and 414.

- Panel 402 9. PA-ICC HATCH BULKHEAD RING INSTALLATION  
1. Remove protective ring by unsecuring two restraint clips from launch restraint brackets using TBD wrench and loosen two restraint straps.

NOTE

If time available, remove four launch restraint bolts from each of the two launch restraint brackets with Ratchet and Socket. Dispose of blue launch restraint bolts brackets in "Return to Houston" Bag.

- PA-ICC Hatch
2. Unfold protective ring and connect protective ring brackets on hatch hinge pin. Verify bracket mechanisms locked to hinge pin.
  3. Secure bottom portion of protective ring alignment pin on socket of handle mechanism assembly. Rotate hatch handle in direction of close (ÇAËPÜITO) position.

#### 10. ALARM CONTROL PANEL ACTIVATION

- ICC Panel 429
1. POWER → On  
 ✓LED F1 - ■ (off)  
 ✓TTS/LOCAL - LOCAL
  2. TEST pb - Push and Hold  
 ✓Light CL - ■ (blinking)  
 ✓All other lights and LEDs - □ (on)  
 ✓Siren activated - □
  3. TEST pb - Release  
 ✓LED F1 - ■ (off)  
 ✓All other lights and LEDs - ■ (off)  
 ✓Siren off

#### 11. INSTALL AIR DUCTING

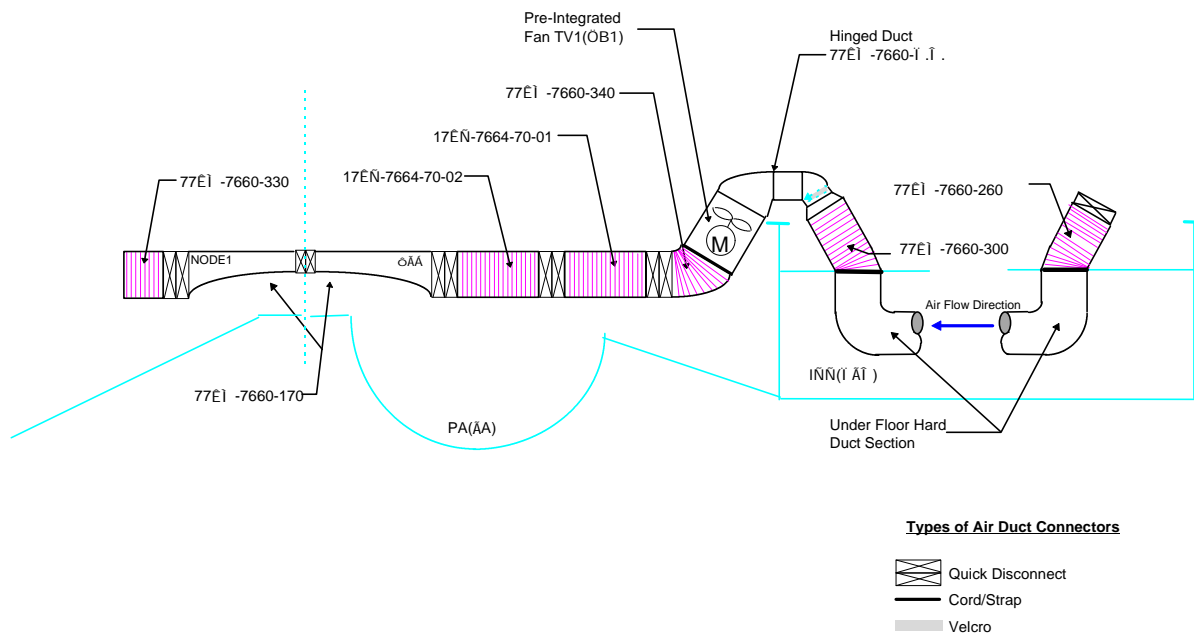


Figure 1.- Air duct connections.

- PA
1. Deploy duct rotator device.
- ICCI Panel 102
2. Remove launch restraint tape from flexible duct (77KM-7660-300) and unfold.

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|----------------------------|---|
| PA                         | 3. Secure free-end of Flexible Air Duct (77KM-7660-300) using Velcro on end of duct rotator device.                         |
| ICC<br>Behind<br>Panel 202 | 4. Open TBD container (77KM-7660-280).<br>Retrieve flexible duct (77KM-7660-340).   |
| PA                         | 5. Using strap, connect Flexible Air Duct (77KM-7660-340) to flange of the TV1(ÖB1) fan.                                    |
| Panel 202                  | 6. Unstow Flexible Air Duct (77KC-7664-70-01).  |
| PA                         | 7. Connect Flexible Air Duct (77KC-7664-70-01) and connect with Flexible Air Duct (77KM-7660-340).                          |
| Panel 202                  | 8. Unstow Flexible Air Duct (77KC-7664-70-02).  |
| PA                         | 9. Connect Flexible Air Duct (77KC-7664-70-02) and connect with Flexible Air Duct (77KM-7660-340).                          |
| ICC<br>Panel 204           | 10. Remove FGB Rigid Air Duct (77KM-7660-170) by unsecuring restraint clamps (two) using TBD tool.<br>Tm pry stow bolts.    |
| ICC<br>Panel 204           | 11. Remove Node 1 Rigid Air Duct (77KM-7660-170) by unsecuring restraint clamps (two) using TBD tool.<br>Tm pry stow bolts. |
| PMA1-<br>PA Hatch          | 12. Connect FGB Rigid Air Duct and Node 1 Rigid Air Duct.   |
| PA                         | 13. Connect free-end of Flexible Air Duct (77KC-7664-70-02) to FGB Rigid Air Duct.  |
| ICC<br>Behind<br>Panel 202 | 14. Retrieve Flexible Air Duct (77KM-7660-330).   |
| PMA1                       | 15. Connect free-end of Flexible Air Duct (77KM-7660-330) to Node 1 Rigid Air Duct.   |
|                            | 16. Detach cap to PMA 1 hard duct inlet.<br>Stow cap.   |
|                            | 17. Connect free-end of Flexible Air Duct to PMA 1 duct inlet and secure with flat band coupling.                           |

Panel 229 12. READY OCİ -4 FIRE EXTINGUISHER IN ICC  
1. Remove blue launch restraint bolts (four) from clamps (two) with Ratchet and Socket (8mm Deepwell).  
Stow clamps and bolts in "Return to Houston" Bag.

Panel 230 13. Ëİ K-1 GAS MASK READINESS IN ICC  
1. Remove lock wire from cap and dispose in Trash Bag.

EPCS 14. ACTIVATE NODE 1 - FGB INTERMODULE VENTILATION  
Node 1: ECLSS  
NODE 1: ECLSS

sel Node\_1\_Aft\_Port\_IMV\_Fan

√Close Cmd - Ena  
sel RPC Commands  
**cmd Close Execute**  
√Position - Close

NODE 1: Aft Port IMV Fan

sel Fan Commands  
**cmd On Execute**  
√Stat - In Trans

NODE 1: Aft Port IMV Fan

Wait 15 seconds.  
√Stat - On  
√Spd, rpm: 7462 --- 9500

EPCS 15. VERIFY FGB BOOSTER FAN OPERATIONS  
FGB: ECLSS  
FGB:ECLSS

1. √TsV 1, Volts = TBD ± TBD

PMA 1 2. Close grille cover on PMA 1 hard duct using Velcro tabs (three).

FWD ICC 16. FGB VENTILATION SCREEN CLEANING  
Panels 201,  
301, 401  
Compartment  
1. Clean ventilation screens (three) using Duct Tape.

2. Dispose of Tape in Trash Bag and transfer to shuttle trash.